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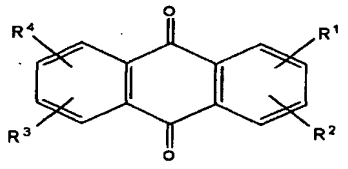
(54) Title: ANTHARQUINONE COMPOUNDS AS ANTI CANCER COMPOUNDS



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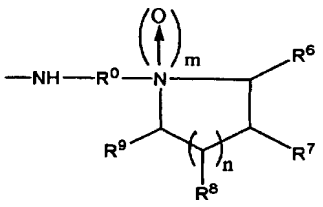

(II)

(57) Abstract: Anthraquinone compounds of the general formula (I) or a salt thereof (Formula I) in which R^1 to R^4 are each selected from the group consisting of H, C_{1-4} alkyl, X^1, $-NHR^0N(R^5)_2$ in which R^0 is a C_{1-12} alkanediyl and each R^5 is H or optionally substituted C_{1-4} alkyl, and a group of formula (II) in which at least one of R^6,R^7 and R^8 is selected from X^2 , and X^2 substituted C_{1-4} alkyl and any others are H or C_{1-4} alkyl; R^9 is selected from H, C_{1-4} alkyl, X^2 and X^2 substituted C_{1-4} alkyl; m is 0 or 1; n is 1 or 2; X^1 is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group; and X^2 is a halogen atom, a hydroxyl group, a C_{1-6} alkoxyl group, an aryloxy group or an acyloxy group; provided that at least one of R^1 to R^4 is a group of formula (II). The N-oxides are useful prodrugs which are selectively bioreduced in hypoxic tumours to the corresponding cyclic amine derivatives. The amine compounds are cytotoxic and may be used as alkylating agents having topoisomerase II inhibiting activities in cancer therapy.

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